



immequip
engineering

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ABOUT US

PASSION FOR INNOVATION

Since 1998, IMMEQUIP has been developing tailored **solutions for the French and international food processing industry.**

The company has specialised in **the cooking/extrusion process** and the loose product conveying **process**, and creates **specific installations that exactly meet the needs and constraints of each customer**

IMMEQUIP is a subsidiary of the Europe Snacks group, and uses its extensive experience and known-how in the design of special machines to offer innovative equipment, in compliance with the new food safety standards.

STUDY, design, production, installation... Each phase of the project is performed internally by market and customer-orientated qualified professionals.

Their daily challenge: **imagine and produce THE solution that will meet your needs!**

IMMEQUIP is a human-scaled organisation based on the strong values of trust, **partnership, commitment, quality**, and accessibility.

Through an ongoing monitoring process, IMMEQUIP is continuously seeking new solutions to develop new products, reduce your costs, minimise maintenance and handling operations, and comply with hygiene and sanitation constraints.



HISTORY

1998 - Creation of IMMEQUIP Ingénierie by Europe Snacks, manufacturer of salted snacks for the mass distribution sector.

1999 - **IMMEQUIP acquires its own premises** in St Denis la Chevasse in Vendée to focus on the design of special machines and industrial maintenance.

2008 - After 10 years of experience and development within the Europe Snacks group, **IMMEQUIP marks a turning point by diversifying its activities**. IMMEQUIP has acquired a genuine know-how in the extrusion sector, and is starting to meet the demands from customers outside the group.

The company then redesigns its activity, reviews its structure and develops its range of products and services. IMMEQUIP positions itself as a **"creator of turnkey solutions"**

2012 - IMMEQUIP is recognised as a true partner in the supply of specific extrudate manufacturing equipment, and continues to develop its "loose product conveying process" activity.

IMMEQUIP is focused on the future while remaining attentive to potential developments and requests from its customers and the Europe Snacks group in order to extend its offer and product range through innovation.



WHAT WE DO

KNOW-HOW



The driving force behind the development of our turnkey installations for the food processing industry is a team of dynamic and committed people working with the latest IT tools and software.

Our engineers, design office technicians, electricity and automation specialists, millwrights, electricians, etc. put the best of their skills at your service.

We offer solutions ranging from analysis to installation, through design, procurement and production, of the equipment alone or the entire line.

All our machines are guaranteed for **12 months (parts and labour)**, we provide our services throughout the country.

Our added value

Great minds - an essential resource for creating innovating solutions. For each project, in order to best respond to your request, requirements or objective.

Experience - IMMEQUIP is the subsidiary of an international food processing company, and has designed and produced special machines for over 10 years for the group before entering other markets. IMMEQUIP has gained considerable experience in solution testing and has acquired in depth knowledge of the sector.

A "project" based approach - each request is unique and it shall be the subject of a specific study. Our solutions can be tailored precisely to your existing production tool and adapted to your own specifications.

ACTIVITIES

EXTRUSION

IMMEQUIP is the only player capable of designing and integrating equipment for cooking/extrusion lines and has now attained a solid reputation based on experience and know-how.

We offer a range of specific cutters, metering and dispersing equipment, coating drums, etc. adapted to your business sector and the required extruded finished product.

We provide complete systems and sub-sets and we can supply ready-for-use machines corresponding to your specifications.

CONVEYING

We have acquired solid expertise in the loose product conveying process, and we design innovative equipment meeting the new hygiene and sanitation standards for food security. Several of our machines are registered at the French national industrial property institute.

LIFTING CONVEYOR, straight conveyor, single or double gooseneck... We create automated solutions, using techniques and materials in line with your expectations and specifications.



HOW?

DETAILED

OUR PROJECT-BASED APPROACH

At IMMEQUIP, our goal is not to mass-produce our machines. **We consider each request with its own specific characteristics**, and provide the best turnkey solution through a project-based approach.

Each phase of your project is managed by our different services. Design office, electricity-automation, fitting, mechanical engineering, tests... **Many "minds and hands" strive to develop your idea into a product, supervised by the same contact persons all through the process.**

Our strength lies in our complementary skills: we are not just a design office, or a manufacturer; **we have the ability to manage a project from start to finish** within a human-scaled structure.

IMMEQUIP shall provide an adapted solution to the technical or economical constraints of your project, with the highest quality standards and innovative ideas.

CONTACT US!



DESCRIPTION

Trace the progression of your project with IMMEQUIP in 4 phases.

You will have every good reason to place your trust in us!

1/ Need analysis

- Discover the product
- Discover the production constraints
- Discover the market constraints
- Exchange ideas on mechanisation solutions with the customer.

2/ PROJECT analysis

- FEASIBILITY study
- PREPARATION OF A PROJECT PLAN
- Drafting of the specifications
- Financial proposals

3/ Design of your installation

- MANUFACTURING of the parts
- PREPARATION of the technical file
- Procurement and subcontracting management
- Automation assembly and tests

4/ Assembly and setting to work

- Equipment installation
- Integration of possible existing structures
- Cabling and tests
- Industrial setting to work
- Supply of technical files



EXTRUSION



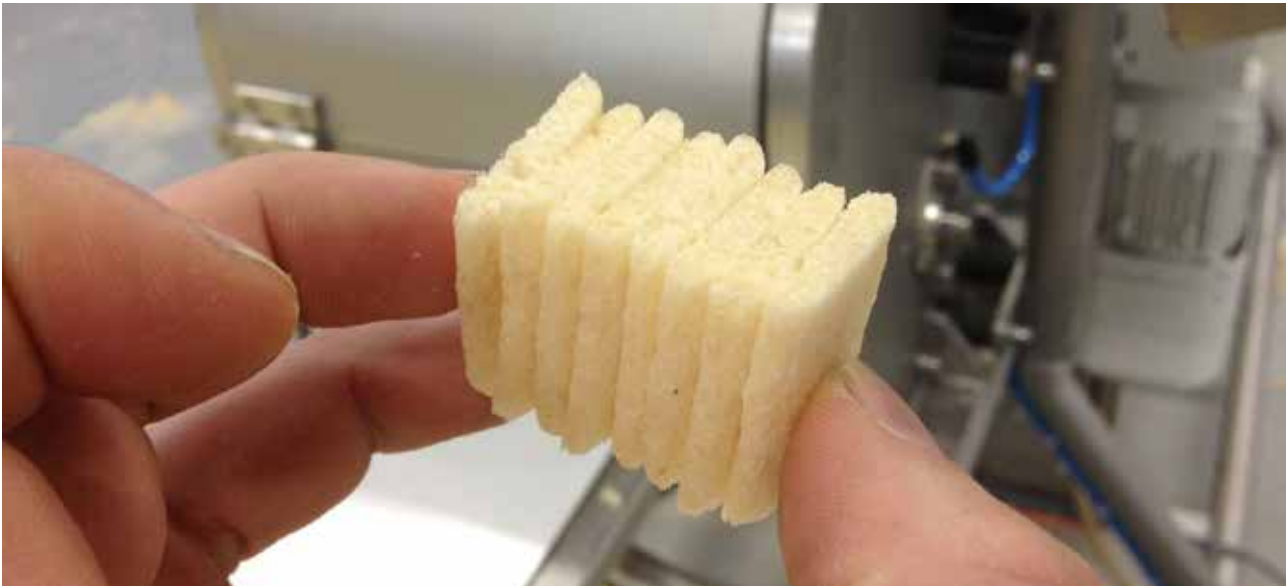
- CUX special snacks cutter
- CLEX offset blade cutter type
- SCOL colouring unit
- CUXLAM rolling mill cutter
- CPX100 forming crimper cutter
- TUX type coating drum
- SKDX coating unit
- DX-KT metering-dispensing equipment
- ELV flexible-auger lifting conveyor
- REFX cooler

UNIQUE RANGE ON THE MARKET

Based on experience and close collaboration with its partners, **IMMEQUIP** is capable of studying and **designing the standard production line best adapted to market constraints.**

Extensive expertise and know-how allows IMMEQUIP to design and provide different types of extrusion equipment.

TAKE YOUR PICK!



CUX SPECIAL SNACKS CUTTER



For continuous in-line cutting of extruded or co-extruded sticks, flakes, flat bread, pillow, etc. type snacks

- Speed according to model from 100 to 650 kg/h.
- In-line integration downstream from the extruder on frame or on lifting conveyor.

The **CUX series SNACKS cutter** is an in-line **horizontal rotating pelletizer cutter** installed **downstream from the extruder**.

The gradual effect multi-blade **rotating cut design** makes this machine easy to use, **sturdy and noiseless**.

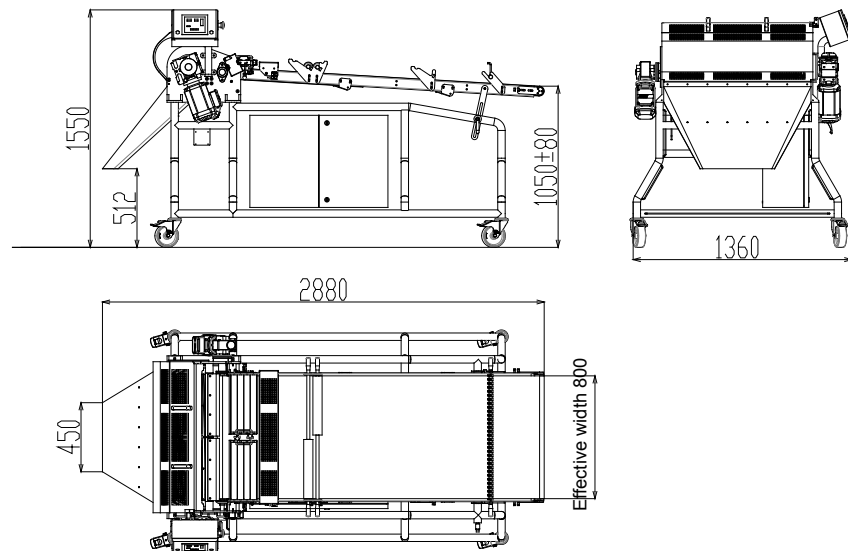
With its tubular design entirely made of stainless steel and its high-temperature endless woven cotton belt, the cutter assembly features a high standard of hygiene and sanitation.



Standard dimensions

<u>Reference</u>	<u>Conveyor belt</u>	<u>Overall dimensions in mm</u>	<u>Snacks capacity</u>	<u>Max. nbr of strands</u>	<u>Elec. power</u>
CUX 400	L 400 x l 1690	L 2840 x l 1000 x H 1775	300 kg/h	≤ 24 strands	2.1 KW/400 V
CUX 600	L 600 x l 2690	L 3840 x l 1225 x H 1775	500 kg/h	≤ 32 strands	2.7 KW/400 V
CUX 800	L 800 x l 2690	L 3840 x l 1425 x H 1775	650 kg/h	≤ 40 strands	3.2 KW/400 V

As part of our ongoing policy for product development, design and equipment specifications described above may be subject to change without notice.



Drawings of the CUX-800 model

TECHNICAL CHARACTERISTICS OF THE CUX MODEL

- Ø 60 mm tubular frame mounted on swivel castors with locking brakes.
- Adjustable inlet height.
- Removable distribution comb and pressure roller in order to ensure drawing and the correct distribution of strands over the belt length.
- Conveyor fitted with a FDA/USDA certified high-temperature woven fabric belt.
- Belt driven by geared motor unit. Possible linear speed: 0.25 to 1 metre/s.
- Set of 4 single or double pressure rollers to guarantee the correct stability of the cutting length.
- "Gradual" effect cutter with 3 blades. (Advantages: straight cut of the snack, less strain due to load, noiseless machine.)
- Adjustment of the cutting length is possible using a frequency converter. (Min. length: 20 mm and max. 80 mm on the standard blade, longer lengths available on request).
- Cutter driven by geared motor unit. Speed of the cutter 70 to 340 rpm max.
- OPERATOR console screen grouping 10 parametrizable recipes.
- Options available on request.

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CONTINUOUS IN-LINE CUTTING

CLEX TYPE OFFSET BLADE CUTTER

For straight cutting of the extruded or co-extruded snacks at high speed (pet food, snacks or breakfast cereal)

- Speed according to model from 100 to 1500 kg/h.
- Fitted with 1, 2 to 3 cutting heads.
- Standalone equipment, in-line integration downstream from the extruder.

The **CLEX series cutter** is an in-line **offset blade cutter** installed **downstream from the extruder**. Its new ultra-high-speed **cutting design** makes it easy to use, **sturdy**, and ensures perfectly straight continuous cutting.

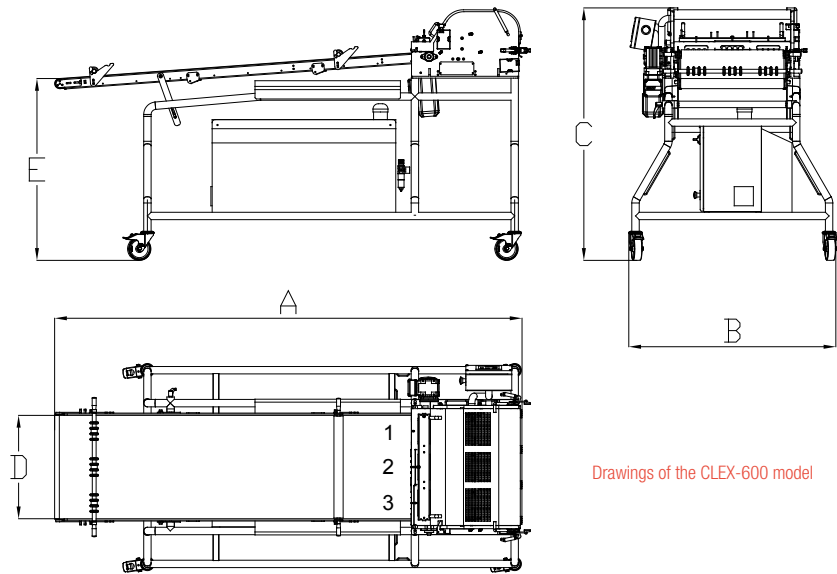
With its tubular design entirely made of stainless steel and its high-temperature endless woven cotton belt, the cutter assembly features a high standard of hygiene and sanitation.



Standard dimensions

Reference	Conveyor belt	Dimensions in mm	Pet food capacity	Max. nbr of strands	Elec. power
CLEX 200	L 200	A 2535 - B 890 - C 1545 - D 275 - E 1000	400 kg/h	≤ 4	1.5 kW/400 V
CLEX 400	L 400	A 2600 - B 1150 - C 1650 - D 475 - E 1000	800 kg/h	≤ 8	2.1 kW/400 V
CLEX 600	L 600	A 3100 - B 1350 - C 1650 - D 675 - E 1200	1200 kg/h	≤ 12	3.2 kW/400 V

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Drawings of the CLEX-600 model

TECHNICAL CHARACTERISTICS OF THE CLEX-600 MODEL

- Ø 48 mm tubular frame mounted on swivel castors with locking brakes.
- Adjustable inlet height.
- Removable distribution comb and pressure roller in order to ensure drawing and the correct distribution of strands over the belt length.
- Conveyor fitted with a FDA/USDA certified high-temperature woven fabric belt.
- Belt driven by geared motor unit. Max. linear speed: 40 metres/min.
- Set of pressure rollers ensuring correct cutting length stability.
- BRUSHLESS technology in positioning or cam profile on the blade drive.
- OPERATOR console screen grouping 10 parametrizable recipes.
- Pressurised cutting kit according to the format of the product to be prepared
- Options available on request.

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HIGH-SPEED STRAIGHT CUT

SCOL COLOURING UNIT

For in-line colouring of extruded and co-extruded type snacks, pet snacks or breakfast cereal

- Capacity 1 or 2 strands.
- Hygienic design, quick cleaning.
- Small standalone equipment easy to install on your extrusion lines.

The colouring principle is based on the **micro-injection of a water-based colouring solution and liquid caramel concentrate**. **3 or 6 spray heads positioned at 120° spray the colourant continuously over the extrudate which thus passes through the colouring enclosure**. An upper hinged casing allows the extrudate to be passed through on start-up. The latter is equipped with baffles so as to provide the best possible seal.

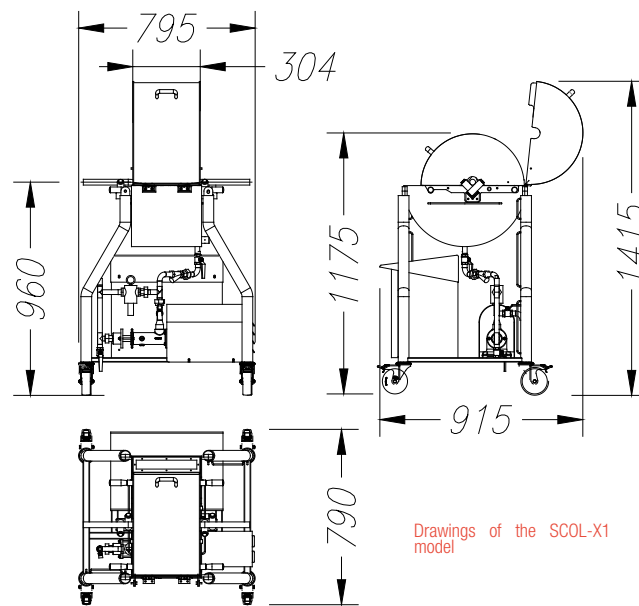
Speed adjustment in litre/hour allows the extrudate to be more or less coloured. Air flowrate adjustment in litre/hour allows the colourant to be more or less finely sprayed. One 600 µ filter fitted upstream of the pump provides operating safety for the spraying nozzles.



Standard dimensions

<u>Reference</u>	<u>Nbr of strands</u>	<u>Dimensions in mm</u>	<u>Max. capacity</u>	<u>Max. nbr of strands</u>	<u>Elec. power</u>
SCOL X1	1 strand	L 795 x I 790 x H 1415	0 to 7 litres/h	1 strand	0.5 kW/400 V
SCOL X2	2 strands	L 975 x I 950 x H 1550	0 to 15 litres/h	2 strands	0.75 kW/400 V

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TECHNICAL CHARACTERISTICS OF THE SCOL X-1 MODEL

- Entirely made of 316 l stainless steel.
- Ø 48 mm stainless steel tubular frame mounted on swivel castors with locking brakes.
- Strand inlet height 960 mm.
- 12-litre colourant storage tank.
- Removable spraying tank with 3 spray heads at 120° with flat jets.
- Colourant injection pump 0 to 7 l/h.
- 600 µ filter fitted upstream of the pump provides operating safety for the spraying nozzles.
- Stainless steel IP66 power cabinet grouping the controls and the process parameter display.
- Electronic flowmeter on the spray air network.
- Low level detection on the colourant tank.
- Pressure control valve and bleed valve on all the low dead centres.
- Safety discharger with the pressure control pressure gauge.

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CUXLAM ROLLING MILL CUTTER

The ideal solution for ultra high-speed rolling and cutting of your extruded snacks

- Production on extrusion line.
- Ultra high-speed continuous cutting.
- Environment and safety.

IMMEQUIP has developed a **new ultra-high speed and continuous cutting design for extruded rolled snacks**. This innovative system allows to select different types of shapes and dimensions for the extruded snacks.

The **CUXLAM rolling mill cutter** is composed of both an adjustable rolling mill with a comb and drawing conveyor system, and a rotating cutter of the CUX 800 range. This assembly is mechanically-indexed and forms **a complete equipment unit with its unique control console and power cabinet**.

The two equipment items, that can be separated if required, are set on two tubular frames with 4 castors, rendering the assembly **standalone and removable**.



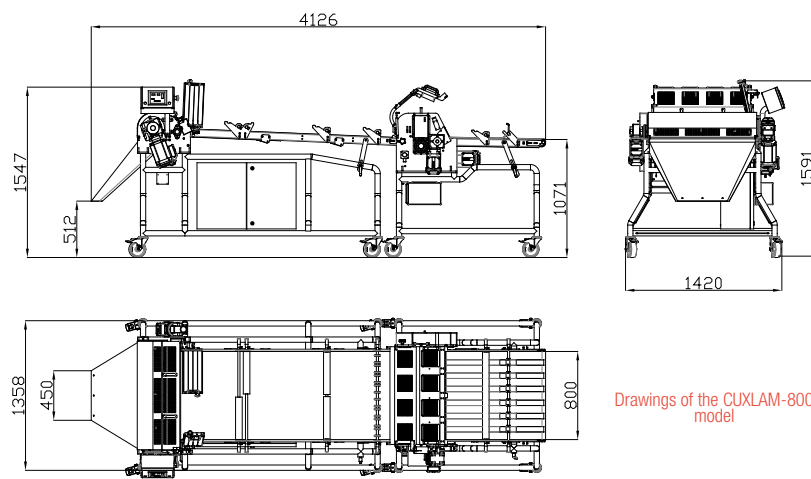
Standard dimensions

<u>Reference</u>	<u>Dimensions in mm</u>	<u>Max. finished products capacity depending on product width example: 6 x 50 mm strips or 600 kg/h in WAVY CHIPS</u>	<u>Electric power</u>
CUXLAM 600	L 2185 x l 980 x H 1435	example: 6 x 50 mm strips or 600 kg/h in WAVY CHIPS	2.5 kW/400 V
CUXLAM 800	L 2185 x l 1115 x H 1450	example: 8 x 50 mm strips or 800 kg/h in WAVY CHIPS	3 kW/400 V

As part of our ongoing policy for product development, design and equipment specifications described above may be subject to change without notice.

Examples of products prepared

- Flat bread L 30 x l 30 thk. 6 mm
- Saddle shape WAVY CHIPS L 50 x l 45 thk. 2.5 mm



TECHNICAL CHARACTERISTICS OF THE CUXLAM MODEL

- 304 l stainless steel tubular frame on castors.
- Equipment can be separated to use the CUX cutter alone.
- Cotton conveyor belts with high temperature silicon coating.
- Adjustable distribution combs
- Pressure rollers
- Pair of rollers, 316 l stainless steel, Ø 200 mm.
- Water-cooled cylinders (optional).
- Cutting wheel with 3 stainless steel blades and gradual cutting principle.
- Products are secured before cutting with retractable removable pressure rollers.
- Adjustable belt speed from 15 to 55 m/min.
- Adjustable cutting speed from 70 to 340 rpm.
- Removable secure guards to access the roller and cutter.
- Secure outlet chute.
- Controlled by touch-screen operator console.
- Built-in recipe management.
- Voltage 400 Volts (+5 / -10 %) three-phase + earth 50/60 Hz.
- Power: 2.5 kW and 3 kW depending on the model.
- 5-bar compressed air
- Compressed air consumption 200 NI/min.

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ULTRA HIGH-SPEED ROLLING & SLICING

CPX100 FORMING CRIMPER CUTTER

For in-line cutting and crimping of extruded and co-extruded snacks, pet snacks or breakfast cereal

- Cutting width 100 mm or 2 strands.
- Ultra-high-speed change of cutting section.
- Standalone equipment.

The CPX series cutter is an in-line forming crimper-cutter installed downstream from the extruder. Its reinforced mechanical design fitted with a couple of Servo-Brushless type motors efficiently ensures the synchronisation between the two rollers.



The **cantilever assembly of the cutting sections** considerably reduces the time required to replace the sections.

It is fitted with a **simplified touch screen**, allowing for perfect control of the extrusion process.

This product is specially designed for:

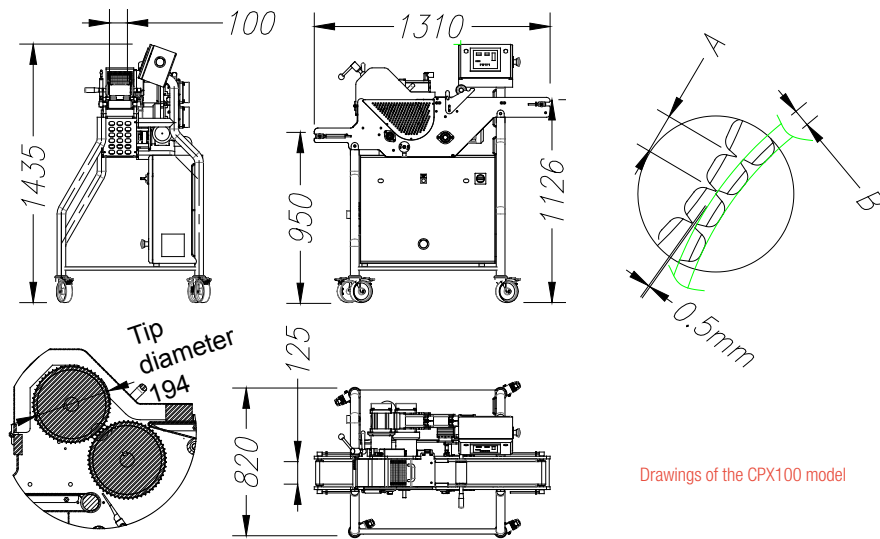
- Small and medium capacity production lines
- Research and development centres



Standard dimensions

<u>Reference</u>	<u>Cutting width nbr of strands</u>	<u>Dimensions in mm</u>	<u>Input / output</u>	<u>Max. nbr of strands</u>	<u>Elec. power</u>
CPX 100	100 - 2	L 1100 x l 820 x H 1435	1100 / 950	≤ 2	1.2 kW/400 V
CPX 150	150 - 3	L 1100 x l 940 x H 1450	1100 / 950	≤ 3	1.5 kW/400 V

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TECHNICAL CHARACTERISTICS OF THE CPX100 MODEL

- Ø 48 mm stainless steel tubular frame mounted on swivel castors with locking brakes.
- Inlet height 1100 mm.
- Removable distribution comb and pressure roller in order to ensure drawing and the correct distribution of strands over the belt width.
- Cutter ring and counter blade made of 316 l stainless steel.
- Belt fitted with a PU food grade belt upstream and downstream.
- Belt driven by geared motor unit. Linear speed 0 to 54 m/min MAX.
- Driven by 2 crimping rollers with BRUSHLESS technology and electric synchronisation principle.
- Operator terminal screen grouping the synchronisation parameters with belt speed and cutting length display.
- Product ejection blower continuously cleaning the cutting rings.
- Voltage 400 Volts (+5 / -10 %) three-phase + earth 50/60 Hz.
- Power: 1.2 kW and 1.5 kW depending on the model.
- 5-bar compressed air
- Compressed air consumption 150 NI/min.

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TUX TYPE COATING DRUM

To continuously coat bulk products with a liquid or powdered solution

- Integration on the production line downstream from the extrusion, drying, cooling, etc.
- Fitted with a liquid spray manifold or powder metering equipment.
- Tubular design entirely made of stainless steel and quality safety guards.

The TUX series coating drum is a cylindrical coating drum to be installed on a continuous production line.

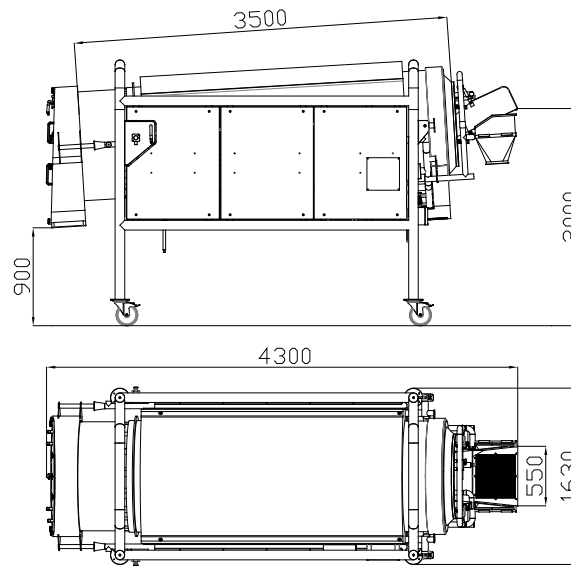
The tangential drive drum design makes it easy to use, **sturdy and noiseless**. It can be associated with a liquid spray manifold or powder metering-dispersing equipment DDX-V2.



Standard dimensions

<u>Reference</u>	<u>Ø of the drum</u>	<u>Overall dimensions in mm</u>	<u>Max. SNACKS capacity density 0.04</u>	<u>Elec. power</u>
TUX 450-2000	Ø 450	L 2450 x l 750 x H 1220	100 kg/h	0.25 kW/400 V
TUX 600-2500	Ø 600	L 2875 x l 1100 x H 1680	300 kg/h	0.37 kW/400 V
TUX 800-3000	Ø 800	L 3980 x l 1340 x H 1950	700 kg/h	0.37 kW/400 V
TUX 1000-3500	Ø 1000	L 4300 x l 1630 x H 2450	1000 kg/h	0.37 kW/400 V
TUX 1200-4000	Ø 1200	L 3980 x l 1825 x H 2650	1400 kg/h	0.55 kW/400 V
TUX 1500-4500	Ø 1500	L 5795 x l 2140 x H 2855	1800 kg/h	0.75 kW/400 V

As part of our ongoing policy for product development, design and equipment specifications described above may be subject to change without notice.



Drawings of the TUX 1000 model

TECHNICAL CHARACTERISTICS OF THE TUX600 MODEL

- Ø 60 mm, 304 l stainless steel tubular frame mounted on swivel castors with locking brakes.
- 316 l stainless cylindrical drum thk. 2.5 mm, fitted with product stirring baffles (specific baffles to be determined).
- Drum driven by geared motor unit, synchronous pulley and belt on torque limiter.
- Adjustable rotation speed from 6 to 20 rpm.
- Removable inlet chute fitted with fines collection drawer and grille.
- Dwell time regulation by drum inclination from 0 to 4° (outlet 0 to -100 mm).
- Fitted with infra-red radiant heaters to maintain the coating enclosure temperature.
- Outlet fitted with a removable chute for product channelling.
- Built-in stainless steel electrical cabinet with variable speed control.
- Removable guards under safety sensors.
- Voltage 400 Volts (+5 / -10 %) three-phase + earth 50/60 Hz.
- Power 0.37 kW depending on the model.

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SKDX COATING UNIT

Slurry and storage tank assembly for continuous metering of seasoning sauce with flavouring powders

- Speed according to model from 25 to 1200 l/h.
- Complete equipment delivered on skid with control cabinet.

The **SKDX skid is part of the coating station** as the TUX coating drum and the DDX powder metering equipment. It is **an essential item for the preparation and metering of the flavouring slurry**.

The slurry tank allows to **mix flavouring powders in oil** and also more viscous pastes **such as** peanut pastes. The storage tank keeps the slurry homogeneous and allows for continuous metering using a volumetric metering pump and a centrifugal pump.

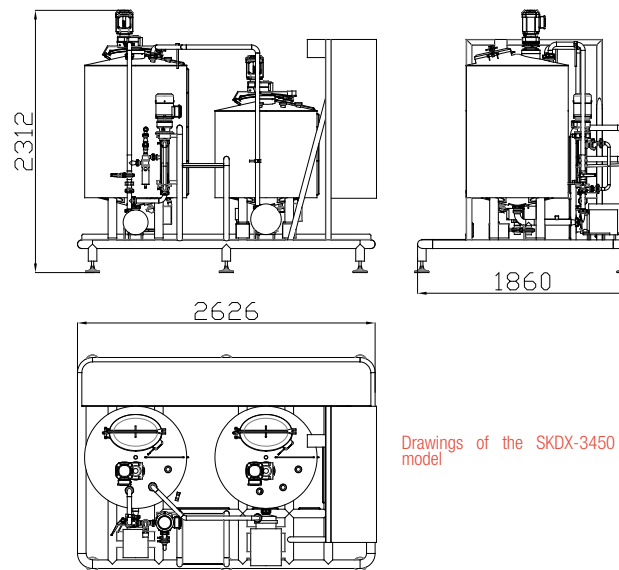
With its innovative design installed on a single frame skid and controlled via a PLC screen, **this innovative solution meets the new production constraints**.



Standard dimensions

<u>Reference</u>	<u>Slurry - storage tank capacity</u>	<u>Overall dimensions in mm</u>	<u>Metering pump flowrate</u>	<u>Elec. power</u>
SKDX-2300	200 litres - 300 litres	L 2450 x l 1600 x H 2200	25 - 250 litres/h	7 kW/400 V
SKDX-3450	300 litres - 450 litres	L 2650 x l 1860 x H 2330	100 - 1100 litres/h	8 kW/400 V
SKDX-6610	660 litres - 1000 litres	L 3270 x l 2100 x H 2800	100 - 1500 litres/h	10 kW/400 V

As part of our ongoing policy for product development, design and equipment specifications described above may be subject to change without notice.



Drawings of the SKDX-3450 model

TECHNICAL CHARACTERISTICS OF THE SKDX-3450 MODEL

- Ø 76 mm, 304 l stainless steel one-piece tubular frame.
- 300-litre net volume heat insulated slurry tank, fitted with a variable speed dispersing equipment paddle.
- Stainless steel centrifugal pump for transfer on the storage tank.
- 450-litre net volume heat insulated storage tank, fitted with a variable slow speed paddle.
- Stainless steel centrifugal pump for continuous recirculation of the slurry.
- Volumetric type metering pump for continuous metering.
- Tanks are kept at constant temperature using standard electric panel heaters.
- Built-in control power cabinet.
- Control and management of the different process phases using a MMI touch-screen.
- 3-way valve and safety pressure sensor.
- Voltage 400 Volts (+5 / -10 %) three-phase + earth 50/60 Hz.
- Power 8 kW depending on the model.
- Options available on request: double-walled hot water circulation, heating with electric immersion heater, slurry tank on spring scale.

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CONTINUOUS METERING OF THE SAUCE

DX-KT METERING- DISTRIBUTING EQUIPMENT

The solution for metering, conveying and dispersing flavouring powders in your coating units in a single operation

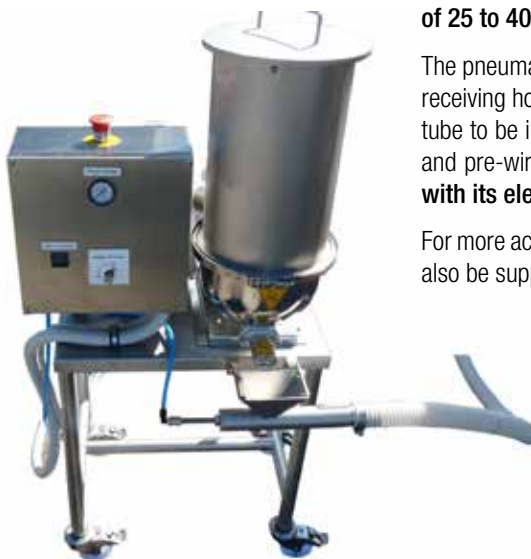
- Continuous metering and dispersing.
- Production on extrusion line.
- Environment and safety.

For clients specialising in SNACKS, IMMEQUIP has developed an innovative **flavouring metering-distributing unit on a removable frame** featuring a **pneumatic conveying module for dispersing**.

The twin-screw technology of the metering unit allows to **volumetrically and finely meter all types of powders from 50 to 700 microns**. It also features a cylindrical hopper for a **capacity of 25 to 40 litres** with a low level detector.

The pneumatic conveying module is composed of a small receiving hopper, a conveying flexible hose and a blowing tube to be installed on the coating drum. The assembled and pre-wired set constitutes the **complete equipment with its electrical cabinet**.

For more accurate metering, this metering equipment can also be supplied in a loss-in-weight **metering version**.



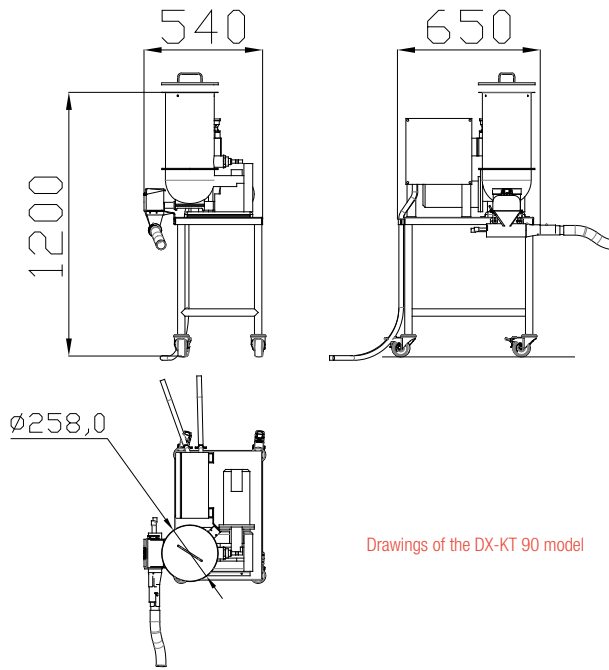
Standard dimensions

Reference	Dimensions in mm	Hopper	Metering equipment capacity / examples	Elec. power
DX-KT 90	L 650 x I 540 x H 1200	40 litres	Fine purified dried salt 200-500 microns designation Flowrate from 5 to 90 l/h Grain size 94 % between 0.15 and 0.5 mm	0.55 kW/400 V
DX-KT 200	L 850 x I 700 x H 1200	80 litres	Cheese powder 50-300 microns designation Flowrate from 20 to 200 l/h Grain size 95 % between 0.15 and 0.2 mm	0.75 kW/400 V

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Examples of products prepared

- Cheese flavouring metering and dressing on snacks with "squirrel-cage" type mechanical dispersing equipment (photo is not contractual)
- Metering and dispersing of salt on the salted snack sticks, etc.



Drawings of the DX-KT 90 model

TECHNICAL CHARACTERISTICS OF THE DX-KT MODEL

- 304 l stainless steel tubular frame on castors.
- Cylindrical storage hopper, capacity 25 and 40 litres with low level detection.
- Assembly mounted on a frame with self-locking stainless steel castors.
- Pneumatic conveying using the stainless steel VENTURI system.
- Flexible PU tubular frame, L=3 m to connect the spray tube to the drum.
- Accessories: FRL, adjustable air flow regulation and electronic flowmeter to adjust the dispersing.
- IP 66 stainless steel electric unit including the adjustable frequency drive.
- Voltage 400 Volts (+5 / -10%) three-phase + earth 50/60 Hz.
- Power: 0.55 kW.
- 5-bar compressed air
- Compressed air consumption 200 NI/min.

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ELV FLEXIBLE AUGER LIFTING CONVEYOR



To supply your process equipment with dry powders

- Meet the conveying constraints for flavouring powders on a continuous coating line.
- Production, process.
- Environment and safety.

Designed for companies working in the powder handling sector, **the ELV** auger lifting conveyor developed by IMMEQUIP forms **a simple and innovative powder conveying and elevation system.**

The lifting conveyor includes **a stainless steel lifting auger and a tapered hopper**, fitted on a fully removable tubular frame.

The "flexible auger" technology of the lifting conveyor allows to **vol-umetrically convey all types of powders**. At the base it is fitted with a tapered hopper with a 120-litre capacity secured with a fixed guard. The assembled and pre-wired set constitutes the **complete equipment with its electrical control unit.**

For very greasy and adhesive powders, it can be fitted with an optional vibrating hopper to facilitate full-flow.



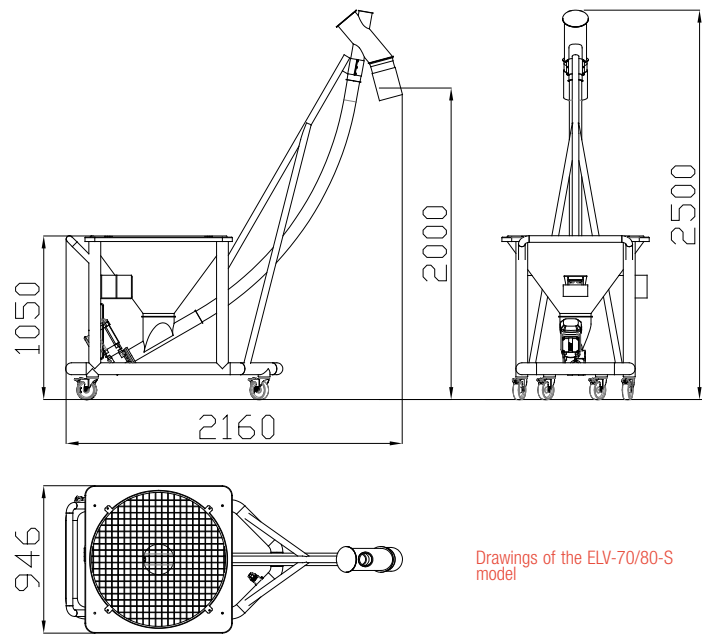
Standard dimensions

Reference	Dimensions in mm	Hopper	Lifting conveyor capacity	Elec. power
ELV-70/80-S	L 2160 x l 950 x H 250	120 litres	Motor in low position, auger pushed Flowrate 500 to 2000 l/h depending on the powders	0.55 kW/400 V
ELV-70/80-XL	L 2740 x l 950 x H 3590	120 litres	Motor in high position, auger pulled Flowrate 500 to 2500 l/h depending on the powders	0.55 kW/400 V

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Application examples

- Transfer of corn meal in the extrusion machine hopper
- Transfer-lifting of wheat starch in a spring scale mixer
- Transfer of lactose powder in a slurry tank, etc.



Drawings of the ELV-70/80-S model

TECHNICAL CHARACTERISTICS OF THE ELV MODEL

- 500 to 2500 l/h max. flowrate (according to need and powder characteristics).
- Lifting height:
 - Size S 2000 mm.
 - Size XL 2800 mm.
- Assembly mounted on a stainless steel frame with self-locking castors.
- 120-litre capacity tapered storage hopper.
- Removable fixed safety guard.
- 304 stainless steel, flexible auger, outside \varnothing 65 mm.
- Flexible polyacetal 6 natural food grade tube, \varnothing 70/80 mm.
- Electrical unit including a thermal-magnetic circuit-breaker.
- Voltage 400 Volts (+5 / -10 %) three-phase + earth 50/60 Hz.
- Power: 0.55 kW.
- It is possible to install a vibrating hopper as an option.

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REFX COOLER

For cooling and/or pre-drying of cereal and pet snacks

- Meets the cooling needs of the in-line products.
- Easy integration on the production line with reduced dimensions.
- Multiple adjustments are possible to ensure your product is perfectly cooled.
- Mechanically welded design made of painted steel or entirely made of stainless steel.

The multi-level belt cooler developed by IMMEQUIP is based on a simple air/product exchange concept. A large volume of single flow air runs through the product layer to cool it off.

The high suction capacity hood allows to capture and extract air outside the room. Fresher ambient air shall ensure higher quality cooling.

The number of levels and the width of the conveyor belts form an important **exchange surface**.

The change of level ensures the **mixing** and thus **the perfect homogeneity of the cooling process**.



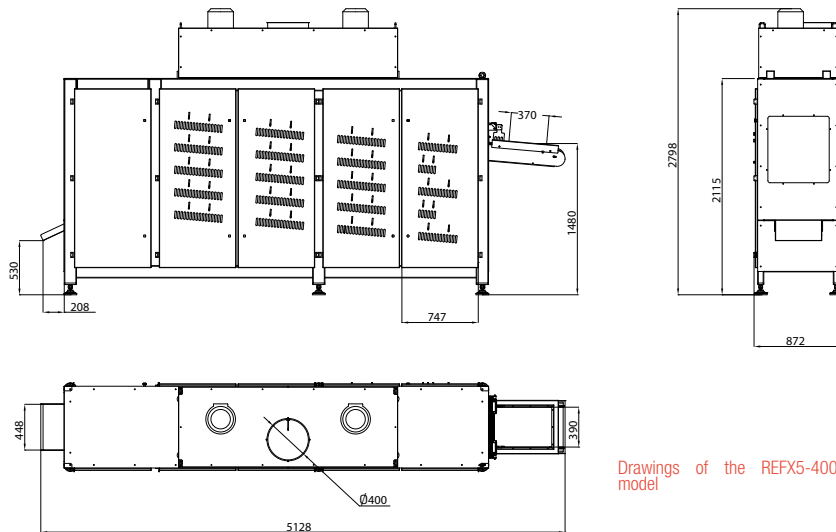
Standard dimensions

Reference	Levels	Effective width	Dimensions in mm	Exchange surface	Extraction capacity	Elec. power
REFX-800	1	750 mm	L 5260 x l 1470 x H 2160	2.8 m ²	5500 m ³ /h	3 kW/400 V
REFX3-400	3	390 mm	L 5130 x l 875 x H 2360	4 m ²	11000 m ³ /h	5 kW/400 V
REFX5-400	5	390 mm	L 5130 x l 875 x H 2800	7 m ²	11000 m ³ /h	6 kW/400 V
REFX5-1000	5	980 mm	L 5130 x l 1475 x H 2800	15 m ²	16500 m ³ /h	8 kW/400 V
REFX7-1400	7	1340 mm	L 6370 x l 1930 x H 3160	38 m ²	22000 m ³ /h	11 kW/400 V

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Application examples

- Cooling of ready-to-eat cereals prior to coating
- Cooling of pet snacks
- Cooling and pre-drying of flake cereals, etc.



Drawings of the REFX5-400 model

TECHNICAL CHARACTERISTICS OF THE REFX5-400 MODEL

- Screwed and mechanically-welded steel frame assembly painted with RAL 9006.
- All parts in contact with the product are made of 304 l stainless steel.
- Centre distance of the belts, length 4000 mm. Effective width 390 mm.
- Effective cooling over 5 levels, thus 7 m².
- Fitted with 5 blue PU mesh conveyors 2 x 2 mm with reinforced U-shaped welded edges.
- Drive drum, \varnothing 138 mm, coated with white nitrile.
- Slidebed with \varnothing 10 mm stainless steel open round sections.
- Driven by pulley, chain and SEW geared motor unit, power 1.5 kW.
- Adjustable belt speed for dwell time from 3 to 13 minutes.
- Ventilation unit 2 x 5500 m³/h with an acoustic hood
- Discharge duct \varnothing 400 mm.
- Pneumatic distribution comb on the inlet.
- Controlled by touch-screen operator console. Built-in recipe management.
- Voltage 400 Volts (+5 / -10 %) three-phase + earth 50/60Hz.
- Power 6 kW depending on the model.
- 5-bar compressed air Compressed air consumption 600 NI/min.

CONVEYING PROCESS



- BELTFLEX SDC-H lifting conveyor
- SD-H type straight conveyor
- SCDC- H type tubular conveyor
- DCDC- H type tubular conveyor
- ED-H straight lifting conveyor
- Feeder Fastback FFB-200

OUR MOTTO: FOOD SAFETY

Since we are well aware of **sanitation and hygiene** constraints that must be complied with, we have specialised in **the loose product conveying process**.

We have specially developed **innovative products**, some of which are registered at the French national industrial property institute.

CHOOSE THE FRONT-LINE PLAYER!



BELTFLEX SDC-H TYPE LIFTING CONVEYOR

The very first agro-food hygienic lifting conveyor adjustable in just a few minutes

The new IMMEQUIP BELTFLEX SDC-H (Super Drive Conveyor-Hygienic) lifting conveyor meets constraints related to:

- Production and quality,
- Hygiene and sanitation.
- Environment and safety.
- Investment.

Its **articulated tubular design** allows to set different working positions. It features a variable inclination from 35 to 75°, **and therefore can be set-up closest to the production equipment**. The modification can be performed by one operator with the hydraulic version.

Fitted with a SUPERDRIVE VOLTA PU homogeneous belt with flights and an INTERROLL drive drum on a sturdy stainless steel design, this lifting conveyor shall be easy and quick to re-use on your different processes.

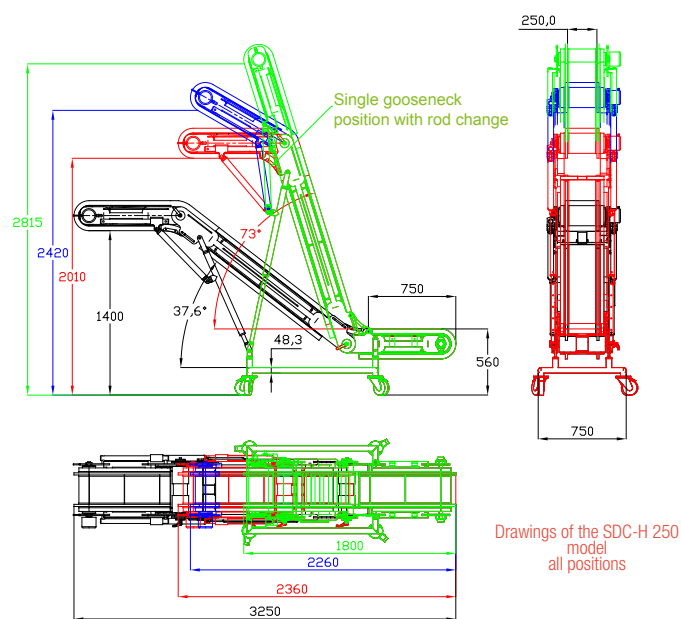
Cut back on multiple investments and reduce the space occupied in the production area!



Standard dimensions

<u>Reference</u>	<u>Belt width (mm)</u> <u>Total - Effective width</u>	<u>Flights</u> <u>Height - Spacing (mm)</u>	<u>Capacity depending</u> <u>on product</u>	<u>Power - speed</u>
SDC-H 200	320 - 200	40 - 200	1200 litres/h	0.16 kW - 11.4 m/min
SDC-H 250	370 - 250	30/50 - 250	2000 litres/h	0.14 kW - 7.2 m/min
SDC-H 300	450 - 300	50/70 - 250	2700 litres/h	0.18 kW - 13.2 m/min
SDC-H 400	550 - 400	70/100 - 333	2700 litres/h	0.33 kW - 22.8 m/min

As part of our ongoing policy for product development, design and equipment specifications described above may be subject to change without notice.



TECHNICAL CHARACTERISTICS OF THE SDC-H MODEL

- Ø 48 mm, 304 l stainless steel tubular frame mounted on swivel castors with locking brakes.
- Mechanical articulation of the frame on PEHD bearings.
- Lifting angle from 35 to 75° with the possibility to change to a single "gooseneck". System protected by a patent application
- Lifting height adjustable from 1400 to 2815 mm.
- 6 fixed positions secured with keys.
- PU homogeneous positive drive belt with welded flights H 50 mm.
- Straight, tilted flights or scoops available.
- Effective conveying width 250 mm.
- Sidewalls H 50 mm or fixed PEHD boards H 100 mm.
- High standard of hygiene certified by FDA, USDA.
- Driven by PEHD pulley and drive drum P: 0.04 to 0.33 kW.
- Speed: 4.2 to 22.8 m/min.
- Variable speed (option).
- Adjustment assistance with a pump or hydraulic jacks (option).

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PROTECTED BY PATENT NO.10/00532

SD-H TYPE STRAIGHT CONVEYOR

The hygienic single belt conveyor is the essential equipment for you agro-food production lines

The new **SD-H type straight conveyor** designed by IMMEQUIP meets the following constraints:

- Production and quality,
- Hygiene and sanitation.
- Environment and safety.

Its tubular design entirely made of stainless steel and its homogeneous PU belt provide for high quality hygiene standards. It is thus **certified for the entire food processing industry** according to the FDA/USDA standards.

It is fitted with a **PU tearproof moulded cogged belt and one-piece PEHD sprockets**, the SD-H conveyor ensures perfect **guidance without wear and slide** with the positive drive concept.

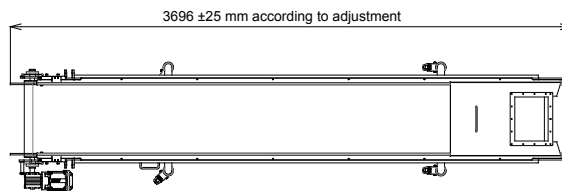
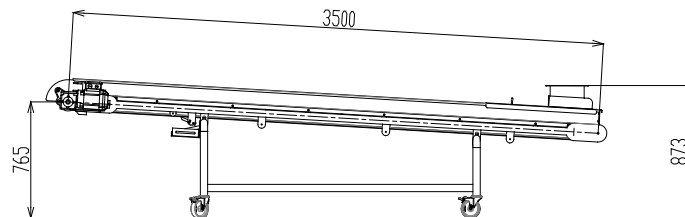
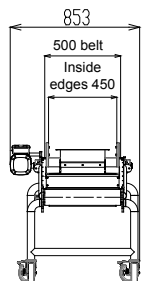
Its open design makes daily cleaning and **maintenance easy without constraints**.



Standard dimensions

<u>Reference</u>	<u>Conveyor width (mm)</u> <u>Total - Effective D dimension</u>	<u>Centre distance</u>	<u>Capacity depending on product</u>	<u>Power - speed</u>
SD-H 250	500 - 200	2350	1200 litres/h	0.18 kW - 15 m/min
SD-H 400	550 - 325	2850	2000 litres/h	0.25 kW - 20 m/min
SD-H 600	850 - 525	3350	2700 litres/h	0.55 kW - 25 m/min
SD-H 800	1050 - 725	3350	4000 litres/h	0.75 kW - 25 m/min

As part of our ongoing policy for product development, design and equipment specifications described above may be subject to change without notice.



Drawings of the SD-H 450-3500 model

TECHNICAL CHARACTERISTICS OF THE SD-H 400 MODEL

- Ø 48 mm, 304 l stainless steel tubular frame mounted on swivel castors with locking brakes.
- PU homogeneous positive drive moulded cogged belt
- Drum centre distance: 2850 mm
- Effective conveying width 325 mm.
- Slidebed with stainless steel round sections or PEHD slides depending on the load.
- Sidewalls or fixed boards (PEHD or stainless steel), H 120 mm.
- PEHD one-piece sprocket drive.
- Geared motor with wheel and screw guard P 0.18 to 0.55 kW.
- Belt speed 2 to 40 m/min.
- Pushed or pulled belt depending on the application.
- On/off control using a thermal-magnetic circuit-breaker.
- Assembly certified according to FDA, USDA standards.

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SINGLE BELT CONVEYOR

SDC- H TYPE TUBULAR LIFTING CONVEYOR

The ideal process equipment for lifting bulk products in very strict sanitation standard environments

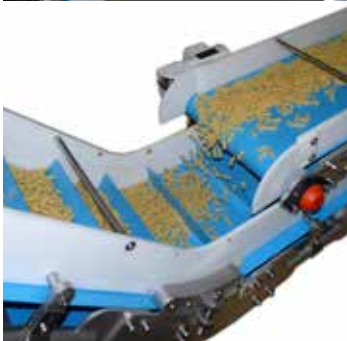
IMMEQUIP designs **customised conveyors** meeting the following constraints:

- Production and quality,
- Hygiene and sanitation.
- Environment and safety.

The **SCDC-H series lifting conveyor** features a **belt with flights**, designed for companies in the food processing sector.

Its **tubular design entirely made of stainless steel** and its **homogeneous PU positive drive belt provide** for high quality hygiene standards.

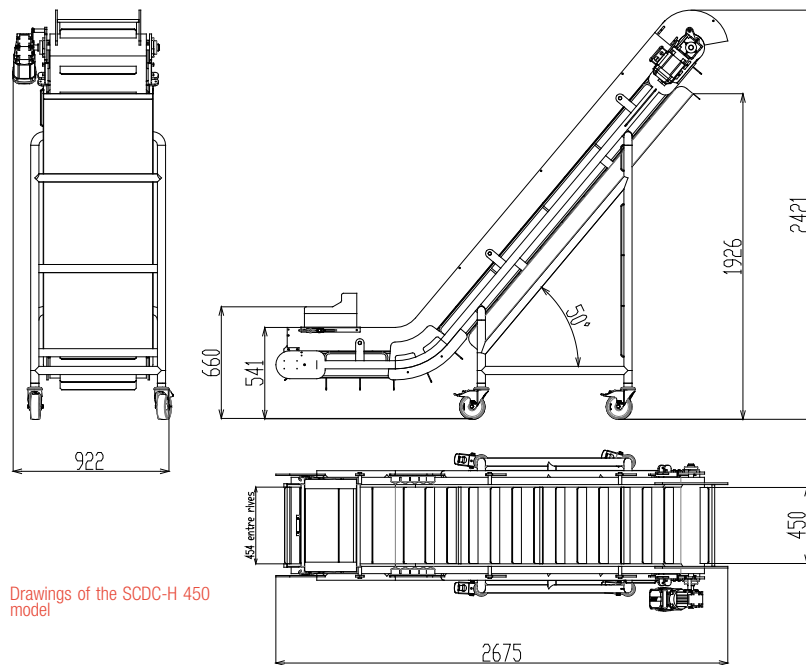
It can also be fitted with **cleaning and drying manifolds** for in-situ cleaning.



Standard dimensions

Reference	Belt width (mm) Total - Effective D dimension	Flights (mm) Height - Spacing	Capacity depending on product	Winding Ø	Power - speed
SCDC-H 200	320 - 200	40 - 200	1200 litres/h	100	0.37 kW - 10 m/min
SCDC-H 250	370 - 250	50 - 200	2000 litres/h	150	0.55 kW - 12 m/min
SCDC-H 300	450 - 300	75 - 250	2700 litres/h	150	0.75 kW - 10 m/min
SCDC-H 450	600 - 450	100 - 333	4000 litres/h	150	1.1 kW - 8 m/min

As part of our ongoing policy for product development, design and equipment specifications described above may be subject to change without notice.



Drawings of the SCDC-H 450 model

TECHNICAL CHARACTERISTICS OF THE SCDC-H MODEL

- Ø 60 mm, 304 l stainless steel tubular frame (industrial castors as an option).
- Lifting angle 73° max.
- Lifting height 6 metres according to the product load.
- PU homogeneous positive drive belt with welded flights, H 100 mm max. (flight to be determined according to the load and product to be conveyed).
- Sidewalls, H 100 mm or fixed PEHD boards, H 200 mm.
- High standard of hygiene certified by FDA, USDA.
- Washing and drying manifold as an option.
- PEHD one-piece sprocket drive.
- Direct drive motor on shaft or drive drum.
- Variable speed available as an option.
- Stainless steel hopper on bottom part.

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DCDC- H TYPE TUBULAR LIFTING CONVEYOR

The double flight belt double gooseneck lifting conveyor designed for companies in the food processing sector

IMMEQUIP designs **customised conveyors** meeting the following constraints:

- Production
- Hygiene and sanitation.
- Environment and safety.

The **DCDC-H** series lifting conveyor is the ideal process in-line equipment for **lifting bulk products** in environments featuring very strict sanitation requirements.

With its **tubular design entirely made of stainless steel** and its **homogeneous positive drive PU belt**, the DCDC-H lifting conveyor or assembly features high quality hygiene standards making it perfectly adapted for **use in the food processing industry**.

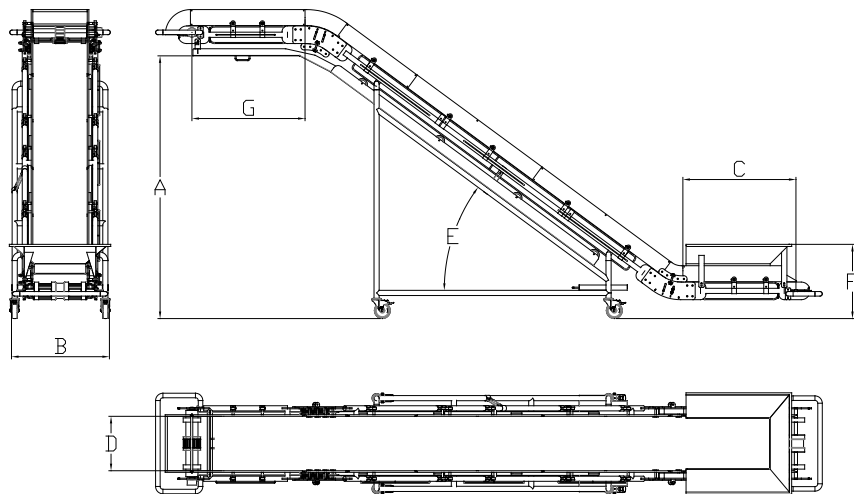
It can also be fitted with cleaning and drying manifolds for in-situ cleaning.



Standard dimensions

<u>Reference</u>	<u>Belt effective width</u>	<u>Flights (mm)</u> <u>Height - Spacing</u>	<u>Capacity depending on</u> <u>product</u>	<u>Max. lifting</u> <u>height (mm)</u>	<u>Power - speed</u>
DCDC-H 200	200 mm	40 - 200	2500 litres/h	3000	0.37 kW - 15 m/min
DCDC-H 250	250 mm	50 - 200	4000 litres/h	3000	0.55 kW - 12 m/min
DCDC-H 400	400 mm	75 - 250	15000 litres/h	4000	0.75 kW - 10 m/min
DCDC-H 500	500 mm	100 - 333	20000 litres/h	6000	1.1 kW - 8 m/min

As part of our ongoing policy for product development, design and equipment specifications described above may be subject to change without notice.



Drawings of the DCDC-H model

TECHNICAL CHARACTERISTICS OF THE DCDC-H MODEL

- Ø 60 mm, 304 l stainless steel tubular frame (industrial castors as an option).
- Lifting angle 75° max.
- Lifting height 6 metres according to the product load.
- Double gooseneck with top and bottom horizontal parts.
- PU homogeneous positive drive belt with welded flights, H 150 mm max. (flight to be determined according to the load and product to be conveyed).
- Sidewalls, H 100 mm or fixed PEHD boards, H 200 mm.
- High standard of hygiene certified by FDA, USDA.
- Washing and drying manifold as an option.
- PEHD one-piece sprocket drive.
- Direct drive motor on shaft or drive drum.
- Variable speed and stainless steel hopper available as an option.

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DOUBLE GOOSENECK LIFTING CONVEYOR

ED-H TYPE STRAIGHT LIFTING CONVEYOR

The double flight belt single segment straight lifting conveyor is perfect for the constraints of the food processing sector

IMMEQUIP designs **customised conveyors** meeting the following constraints:

- Production
- Hygiene and sanitation.
- Environment and safety.

The **ED-H series lifting conveyor** is the ideal process in-line equipment meeting the constraints related to **lifting bulk products in environments featuring very strict sanitation requirements.**

With its **tubular design entirely made of stainless steel** and its **homogeneous positive drive PU belt**, the ED-H lifting conveyor assembly features high quality hygiene standards allowing to **making it perfectly adapted for use in the food processing industry.**

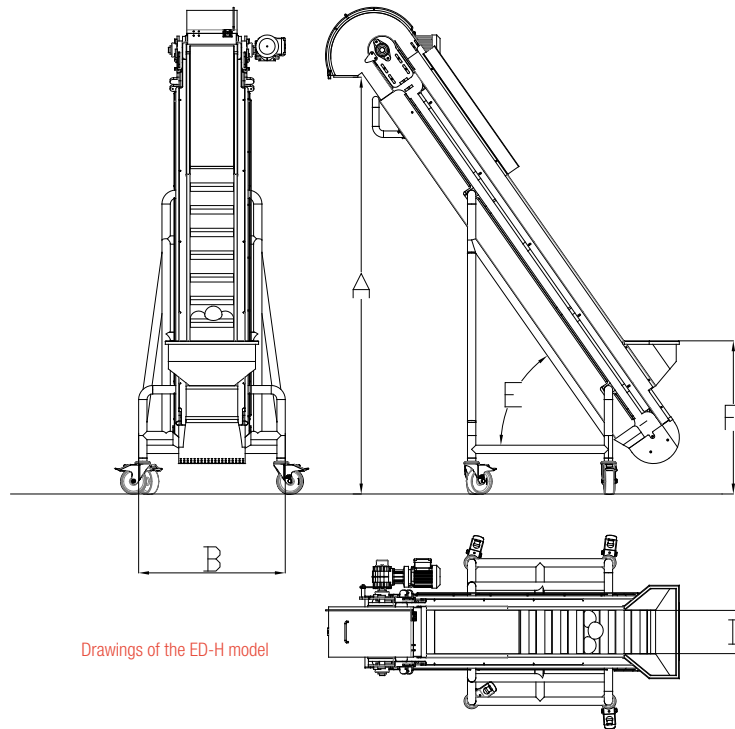
It can also be fitted with cleaning and drying manifolds for in-situ cleaning.



Standard dimensions

Reference	Belt effective width	Flights (mm) Height - Spacing	Capacity depending on product	Max. lifting height (mm)	Power - speed
ED-H 200	200 mm	40 - 200	200 litres/h	3000	0.37 kW - 10 m/min
ED-H 250	250 mm	50 - 200	4000 litres/h	3000	0.55 kW - 12 m/min
ED-H 400	400 mm	75 - 250	15000 litres/h	4000	0.75 kW - 10 m/min
ED-H 500	500 mm	100 - 333	20000 litres/h	6000	1.1 kW - 8 m/min

As part of our ongoing policy for product development, design and equipment specifications described above may be subject to change without notice.



Drawings of the ED-H model

TECHNICAL CHARACTERISTICS OF THE ED-H MODEL

- Ø 60 mm, 304 l stainless steel tubular frame (industrial castors as an option).
- Lifting angle 85° max.
- Lifting height 6 metres according to the product load.
- PU homogeneous positive drive belt with welded flights, H 150 mm max. (flight to be determined according to the load and product to be conveyed).
- Sidewalls, H 100 mm or fixed PEHD boards, H 200 mm.
- High standard of hygiene certified by FDA, USDA.
- Washing and drying manifold as an option.
- PEHD one-piece sprocket drive.
- Direct drive motor on shaft or drive drum.
- Variable speed and stainless steel hopper available as an option.

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STRAIGHT LIFTING CONVEYOR

FEEDER FASTBACK TYPE FFB-200



The ideal solution to change from batch process to continuous process

- "Batch" production to "continuous" production
- Hygiene and sanitation.
- Environment and safety.

IMMEQUIP has developed a **new adhesive product distribution concept, with bulk products stored in Euronorm 200-l containers**, in close collaboration with a major company in the French food processing industry.

It is composed of a **Euronorm 200-l container lifting conveyor**, a **200-l collection hopper**, a **patented FastBack metering conveying system**, built into a fenced enclosure and completely removable.

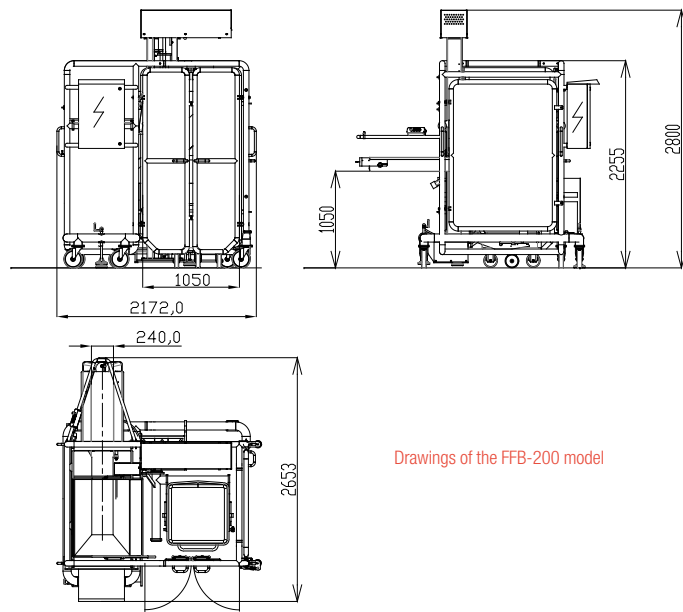
This **innovative FastBack feeder system** allows to **distribute bulk food products in small successive doses in semi-automatic mode**.

Perfectly watertight, it can be disinfected and washed with large amounts of water without any problem.



Application examples

- Metering of ingredients in small doses in a drawer metering unit
- Distribution on a multihead weigher
- Continuous feed on mixing equipment



Drawings of the FFB-200 model

TECHNICAL CHARACTERISTICS OF THE FFB-200 MODEL

- Ø 76 mm, 316 l stainless steel tubular frame on stabilising pads (industrial castors with adjustable pads as an option).
- Permissible load 200 kg.
- Distribution height under trough 1050 mm.
- Distribution in layer adjustable from 20 to 80 mm.
- FastBack type E90 integration.
- Plain or chequered auger according to product adherence.
- Stainless steel hopper capacity 200 litres.
- Mechanical Euronorm lifting conveyor with secure lifting system.
- Built-in control cabinet with automation.
- Metering start-up control with photoelectric cell.
- Adjustable metering sequence and amplitude.
- Power: 2 kW three-phase-400 Volts + earth without neutral.
- Coating drum FastBack integration upon request.

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